REMARKS

Applicants have now had an opportunity to carefully consider the Examiner's comments set forth in the Office Action of August 12, 2004.

Reconsideration of the Application is requested.

The Office Action

Claims 1-29 and 31-32 remain in this application. **Claim 30** has been canceled.

Claims 1-32 stand rejected under 35 U.S.C. §102(b) as being anticipated by Falk (U.S. Patent No. 6,141,120).

Amendments to the Specification

Amendments to the Specification have been made to correct minor mistakes. Amendments to the Specification do not introduce any new subject matter.

The Present Application

The present application is directed to recovering from common "mis-orientations" of the target on the measurement stage through a process of reordering the measurements. Characterization software generates a target with a set of color patches specified in terms of DPS control values (e.g., CMYK signals). The printed target is measured by a measurement stage. The measured values are provided to the characterization software. The software uses the correspondence between the target control values and the DPS measured values to derive the DPS characterization profile or calibrating function. Computation of the calibrating function requires an accurate correspondence between the particular order of printing and measuring as the same set of patches may be measured in many different ways. If it is determined that the measurement order is incorrect, the system re-orders the measurement into a correct measurement order instead of time-consuming re-measurement. The measurement re-ordering may be guided either by a visual confirmation from a user or through an automatic correlation of the color measurements and the device control values.

The Prior Art

Falk is directed to translating RGB values into density values. Falk discloses

a calibration image 500 which is scanned in to produce a scanned calibration image 205. The scanning of the test strip 600 produces scanned strip 216. The test strip 600 is a standard test strip which has a plurality of gray scale patches 601 each having a known absolute density value. A scanner profile module 207 compares scanned test strip data 216 with the test strip density file 205 to determine a mapping between the scanned RGB data 500 and absolute density. Scanner profile compensates each gray scale patch 601 to adjust for differences in scanning gray values as opposed to scanning pure CMYK toner values. Print density module 217 generates a printer profile 214 by using the calibration data 204, calibration image 215 and RGB to density converting map of the scanner profile 207. Calibration profile set 211 is generated using characterization profile set 208 and printer profile 214. A user may edit characterization profile set 208 after which calibration system 200 generates an updated calibration profile 212.

Claims 1-10 Distinguish Over Prior Art

Claim 1 calls fro among other elements: when the measuring indicates a mismatch between the target elements and the output elements, reordering the measured output elements for matching the measured output elements to the target elements whereby the computing of the calibrating function is done without having to re-measure the output elements. Applicants respectfully transverse Examiner's interpretation of Falk. **Falk** is directed to translating RGB values into density values. A printer profile 214 is generated by using the calibration data 204, scanned calibration image 215 and RGB to density converting map of the scanner profile 207. Once printer profile 214 is generated, calibration profile set 211 is generated using characterization profile set 208 and printer profile 214. A user may edit characterization profile set 208 after which calibration system 200 generates an updated calibration profile 212. The **present application** is directed to recovering from common "mis-orientations" of the target on the measurement stage through a process of re-ordering the measurements because the same set of target patches may be measured in many different ways. If it is determined that the measurement order is incorrect, the system re-orders the measurement into a correct measurement order instead of time-consuming re-measurement. Falk does nor disclose or suggest re-ordering of the measurement results to yield the correct measurement order such that the measured output elements match the target

elements. Falk is simply not concerned with identifying and correcting mis-ordering of measurements. It is therefore respectfully submitted that **claim 1 and dependent claims 2-11** distinguish patentably over Falk.

Claims 12-19 Distinguish Over Prior Art

Claim 12 calls for among other elements: identifying a mis-ordering of the measurements of the target elements in the DPS output from a desired order of measurement, and re-ordering the measurement of the target elements of the DPS output in accordance with the desired order thereby facilitating use of the measurements without requirement of re-measurement. The arguments above regarding claim 1 are equally applicable here. Nowhere does Falk disclose or suggest determining a mis-ordering of the measurements and re-ordering the measurements in the desired order. It is therefore respectfully submitted that **claim 12 and dependent claims 13-19** distinguish patentably over Falk.

Claims 20-22 Distinguish Over Prior Art

Claim 20 calls for among other elements: an error identifier indicating a mismatch between the selected sequence of target elements and corresponding sequence of output elements attributable to a mis-ordering of the sensing of the output elements relative to the selected sequence of target elements for the comparison; and, an adjuster for re-ordering the output for the comparison whereby the computing is based on a correct sequencing of the output elements and the target elements. It is alleged in the Office Action that claim 20 is rejected for the same reason as claim 1. After carefully reviewing Falk, Applicants could not find reference to a module that identifies a mismatch between the selected sequence of target elements and corresponding sequence of output elements attributable to a mis-ordering of the sensing of the output elements and to another module that consequently re-orders the output based on a correct sequencing of the output elements and the target elements. Nowhere does Falk disclose or suggest such a system. If Examiner carries on the above interpretation of Falk, Applicants respectfully request the Examiner provide a reference as to where exactly Falk discloses at least the above cited elements of claim 20. For the reasons stated, it is respectfully submitted that **claim 20 and dependent claims 21-22** distinguish patentably over Falk.

Claims 23-28 Distinguish Over Prior Art

Claim 23 calls for among other elements: identifying a mis-ordering of the measurements of the target in the DPS output from a desired order of measurement; based on the identified mis-ordering, providing to a user of the DPS a representation of the correct corresponding measuring process including a desired position of the output orientation and order of measurement; and visually validating by the user of the selected position relative to the representation. **Falk** is directed to translating RGB values into density values. A printer profile 214 is generated by using the calibration data 204, scanned calibration image 215 and RGB to density converting map of the scanner profile 207. Once printer profile 214 is generated, calibration profile set 211 is generated using characterization profile set 208 and printer profile 214. A user may edit characterization profile set 208 after which calibration system 200 generates an updated calibration profile 212. Nowhere does Falk disclose or suggest estimating an error between the actual measurement and the target; based on the estimated error, presenting a user with a correct layout which corresponds to the target, and wherein the user visually checks out the presented layout against the physical target. It is therefore respectfully submitted that **claim 23 and dependent claims 24-28** distinguish patentably over Falk.

Claims 29 and 31-32 Distinguish Over Prior Art

Claim 29 calls for among other elements: extracting a subset of control files which are available at the measuring device and highly probable to include a correct output layout and measurement order for presentation to the user. **Falk** is directed to translating RGB values into density values. A printer profile 214 is generated by using the calibration data 204, scanned calibration image 215 and RGB to density converting map of the scanner profile 207. Once printer profile 214 is generated, calibration profile set 211 is generated using characterization profile set 208 and printer profile 214. A user may edit characterization profile set 208 after which calibration system 200 generates an updated calibration profile 212. Nowhere does Falk disclose or suggest extracting files that most likely include a correct layout and measurement order and presenting the control files to the user for a visual validation as claimed in claim 29. It is therefore respectfully submitted that **claim 29 and dependent claims 31-32** distinguish patentably over Falk.

CONCLUSION

For the reasons detailed above, it is submitted all claims remaining in the application **(Claims 1-29 and 31-32)** are now in condition for allowance. The foregoing comments do not require unnecessary additional search or examination.

No additional fee is believed to be required for this Amendment A. However, the undersigned attorney of record hereby authorizes the charging of any necessary fees, other than the issue fee, to Xerox Deposit Account No. 24-0037.

In the event the Examiner considers personal contact advantageous to the disposition of this case, he/she is hereby authorized to call Marina V. Zalevsky, at Telephone Number (216) 861-5582.

Respectfully submitted,

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11/11/04
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